

Chapter IV

THE WAR IN THE NORTH: TICONDEROGA TO SARATOGA, 1775–1777

At dawn on 10 May 1775, three weeks after the battles of Lexington and Concord, eighty-three Massachusetts and Connecticut volunteers and Green Mountain Boys, led by Ethan Allen and Benedict Arnold, ferried two miles across Lake Champlain and conducted a surprise raid on Fort Ticonderoga. The fort held valuable military stores—particularly artillery—desperately needed by the Continental Army outside Boston. High winds and a driving rain had made the crossing perilous; but on orders from Arnold the raiders took up their weapons, penetrated the fort's crumbling south wall, and entered the parade ground. With dramatic flair Allen reputedly demanded the fort's surrender "in the name of the great Jehovah and the Continental Congress." After offering only token resistance, the British commander complied.

Without delay the Continental Congress voted to evacuate the military stores and then abandon Ticonderoga and nearby Crown Point, which the Americans had also taken. In the northern colonies a violent outcry greeted the news. As a result Congress reversed its decision. Ticonderoga became the main garrison for the Northern Department of the Army, organized in late June under the command of Maj. Gen. Philip J. Schuyler. Because of its strategic location on the pathway to Canada, the fort became the base for Schuyler's abortive invasion of Canada in late summer 1775.

In November Washington sent Col. Henry Knox, commander of the Continental artillery, from Boston to get Ticonderoga's big guns. Knox spearheaded a heroic effort: before the end of January 1776 eighty yoke of oxen had dragged sixty cannon and mortars 300 treacherous snow- and ice-covered miles to the rebel lines outside Boston.

Removal of the captured artillery stores did not signal the end of Ticonderoga's value to the Americans. The British turned back the rebel invasion of Canada, and by early July 1776 survivors of the campaign began to arrive back at Crown Point in need of food, housing, and medical attention. The works at Crown Point were in ruins, so attention turned to Ticonderoga, several miles south.

Efforts to expand the fort's facilities and strengthen its defenses began immediately. During the next twelve months the patriots repaired the main



JOHN TRUMBULL. *Trumbull (1756-1843), a staff officer whose artistic talents led to service as an assistant engineer at Boston Ticonderoga, painted this self-portrait in 1777.*

Museum of Fine Arts, Boston

fortress, improved the outer lines built earlier by the French, and constructed redoubts, blockhouses, and a bridge and boom across Lake Champlain. However, the most significant change was the fortification for the first time of a height southeast of Ticonderoga across Lake Champlain known later as Mount Independence.

During the American occupation of Ticonderoga, John Trumbull, Jeduthan Baldwin, Christopher Pelissier, and Thaddeus Kosciuszko served as engineers. Baldwin was the fort's chief engineer, Pelissier the second-ranking engineer. From time to time assistant engineers taken from the line aided them. A scarcity of rations, equipment, and clothing, combined with the problems of disease, hostile Indians, and adverse weather, made assignment to Ticonderoga a genuine hardship.

When he arrived at Fort Ticonderoga in July 1776, Colonel Trumbull had just been appointed deputy to Maj. Gen. Horatio Gates, General George Washington's adjutant general. Trumbull's account of his tour of duty at Ticonderoga, where he remained until late that year, included a description of the initial occupation of Mount Independence and details of the debate over fortifying nearby Sugar Loaf Hill (later renamed Mount Defiance by the British).

Trumbull, the future artist, claimed credit for first recognizing that Sugar Loaf Hill presented a substantial threat to Ticonderoga. As he recounted years later in the passage from his autobiography below, Trumbull contended—and demonstrated—that not only was the American position within firing range of the mount, but also the summit could be reached and fortified. Even the lame General Arnold joined him in climbing the hill's steep eastern slope!

Further, Trumbull cogently argued that an adequate defense of Ticonderoga and Mount Independence would require ten thousand men and great expense; on the other hand, a permanent work on the summit of Sugar Loaf Hill would sharply reduce overall expense and manpower requirements.

Still adhering to his belief that Sugar Loaf Hill could not be scaled, and hence could not be fortified, Schuyler rejected Trumbull's arguments. Thus, fortification of the Ticonderoga–Mount Independence complex went forward under the shadow of still-undefended Sugar Loaf Hill. A year later the rebels would have cause to regret this missed opportunity.

1. "THE ASCENT WAS DIFFICULT AND LABORIOUS, BUT NOT IMPRACTICABLE"

From John Trumbull's autobiography.

My first duty [July 1776] was, in company with Colonel Wayne,¹ to make a second examination of Mount Independence. He joined in the opinion . . . that the ground was finely adapted for a military post. At the north-

ern point, it ran low into the lake, offering a good landing place; from thence the land rose to an almost level plateau, elevated from fifty to seventy-five feet above the lake, and surrounded, on three sides, by a natural wall of rock, every where steep, and sometimes an absolute precipice sinking to the lake. On the fourth and eastern side of the position ran a morass and deep creek at the foot of the rock, which strengthened that front, leaving room only, by an easy descent, for a road to the east, and to the landing from the southern end of the lake. We found plentiful springs of good water, at the foot of the rock. The whole was covered with primeval forest. . . .

Part of the troops, as they arrived from Crown Point, being ordered to land and take post on this spot, proceeded to clear away the wood, and to encamp. The exhalations from the earth, which was now, for the first time, exposed to the rays of a midsummer sun, combined with the fog which rose from the pestilent lake, soon produced sickness in a new shape—a fever very nearly resembling the yellow fever of the present time—and it was not unusual to see the strongest men carried off by it in two or three days. The four Pennsylvania regiments, the *elite* of the army, were posted in the old French lines, which they were ordered to repair; and at all points the troops were actively employed in strengthening old works of defense, or in constructing new ones.

In the mean time, reinforcements were earnestly solicited from the New England states, and promptly sent on, so that the post soon assumed the aspect of military strength and activity. . . .

The position of the army extended from Mount Independence on the right and east side of the lake, to the old French lines on the west forming our left, protected at various points by redoubts and batteries, on which were mounted more than a hundred pieces of heavy cannon. After some time, it was seen that the extreme left was weak and might easily be turned; a post was therefore established on an eminence, near half a mile in advance of the old French lines, which was called Mount Hope. Thus our entire position formed an extensive crescent, of which the center was a lofty eminence, called Mount Defiance, the termination of that mountain ridge which separates Lake George from Lake Champlain, and which rises precipitously from the waters of the latter to a height of six hundred feet. The outlet of Lake George enters Champlain at the foot of this eminence, and separates it from the old French fort and lines of Ticonderoga. This important position had hitherto been neglected by the engineers of all parties, French, English and American.

I had for some time, regarded this eminence as completely overruling our entire position. It was said, indeed, to be at too great a distance to be dangerous; but by repeated observation I had satisfied my mind that the distance was by no means so great as was generally supposed, and at length, at the table of Gen. Gates, where the principal officers of the army were present, I ventured to advance the new and heretical opinion, that

our position was bad and untenable, as being overlooked in all its parts by this hill. I was ridiculed for advancing such an extravagant idea. I persisted however, and as the truth could not be ascertained by argument, by theory, or by ridicule, I requested and obtained the general's permission to ascertain it by experiment. General (then Major) Stevens² was busy at the north point of Mount Independence in examining and proving cannon; I went over to him on the following morning, and selected a long double fortified French brass gun, (a twelve pounder,) which was loaded with the proof charge of best powder and double shot. When I desired him to elevate this gun so that it should point at the summit of Mount Defiance, he looked surprised, and gave his opinion that the shot would not cross the lake. "That is what I wish to ascertain, Major," was my answer; "I believe they will, and you will direct your men to look sharp, and we too will keep a good look-out; if the shot drop in the lake their splash will easily be seen; if, as I expect, they reach the hill, we shall know it by the dust of the impression which they will make upon its rocky face." The gun was fired, and the shot were plainly seen to strike at more than half the height of the hill. I returned to head-quarters and made my triumphant report, and after dinner requested the general and officers who were with him to walk out upon the glacis of the old French fort, where I had ordered a common six pound field gun to be placed in readiness. This was, in their presence, loaded with the ordinary charge, pointed at the top of the hill, and when fired, it was seen that the shot struck near the summit. Thus the truth of the new doctrine was demonstrated; but still it was insisted upon, that this summit was inaccessible to an enemy. This also I denied, and again resorted to experiment. Gen. Arnold, Col. Wayne, and several other active officers, accompanied me in the general's barge, which landed us at the foot of the hill, where it was most precipitous and rocky, and we clambered to the summit in a short time. The ascent was difficult and laborious, but not impracticable, and when we looked down upon the outlet of Lake George, it was obvious to all, that there could be no difficulty in driving up a loaded carriage.

Our present position required at least ten thousand men, and an hundred pieces of artillery, for its doubtful security. I assumed that it would be found impossible for the government, in future campaigns, to devote so great a force to the maintenance of a single post; and as there was no road on either side of the lake by which an enemy could penetrate into the country south, he must necessarily make use of this route by water; and as the summit of Mount Defiance looked down upon, and completely commanded the narrow parts of both the lakes, a small but strong post there, commanded by an officer who would maintain it to the last extremity, would be a more effectual and essentially a less expensive defense of this pass, than all our present extended lines.

On these principles I proceeded to draw up two memoirs, in one of which was stated the number of men, *ten thousand*, with the expense of

their pay, subsistence, clothing, etc., and of artillery at least *one hundred* pieces, with their attirail [attire], ammunition, etc., necessary to the maintenance of the present system of defense; in the other, an estimate of the expense of erecting a permanent work on the summit in question, large enough to contain a garrison of five hundred men, and mounting twenty five heavy guns, with the ammunition, pay and provisions for that force for one year. The relative expense of the two systems was as twenty to one nearly. These memoirs I accompanied with plans of our present position.

—Trumbull, *Autobiography*,
pp. 29–34.

Lt. Col. Jeduthan Baldwin joined Trumbull at Ticonderoga in July 1776. After having served as an assistant engineer with the rank of captain in Boston and New York earlier that year, Baldwin had received a promotion and orders to go to Canada. However, by the time he reached Quebec Province in mid-May he encountered the retreating American army. Baldwin joined the slow trek back down Lake Champlain and along with countless others suffered from smallpox on the way. On July 8, when he arrived at Ticonderoga, he became the fort's chief engineer, and hastily took on the tasks of laying out defenses, adding buildings, and overseeing scores of artisans. Like most serving in the Ticonderoga wilderness, Baldwin experienced his share of hardship and illness. On 3 September 1776 Congress rewarded him with a promotion to colonel and pay of \$60 per month.³

Excerpts from Baldwin's daily account of his experiences at Ticonderoga reveal his tremendous responsibilities, particularly in regard to the artisans, whose accomplishments included saltpeter factories and soap works.⁴

2. "I HAVE MY HANDS AND MIND CONSTANTLY EMPLOYED NIGHT AND DAY EXCEPT WHEN I AM ASLEEP AND THEN SOMETIMES I DREAM"

From Jeduthan Baldwin's journal.

7 [July 1776]. Recd. orders to go to Ticondaroga with Som Carpenters and to cary all my Baggage, I collected all the Intrenching tools together.

BALDWIN'S JOURNAL. *Jeduthan Baldwin (1732–88), chief engineer at Ticonderoga, kept a detailed journal. This facsimile is of an entry for 28 October 1776.*

Baldwin, *Journal*

Sicoudewaga Octob^r 28. 1776

This morning I visited the workmen as Usual and came in to breakfast about 8. while I was ^{at} breakfast, the alarm gun was fired. about 9. O. clock 4 boats were in sight. at 3 milepoint. one of the boats of the enemy sounded the Channel within a Mile of our Battery at N.S.C. we gave them a few shot, made them fall off again. about 17 boats now about in sight till Sun an hour high & then they all went off — 3 ~~kepts~~ came over from Independant point the 2 ~~kepts~~ at the Mills, & at the landing was order^d in. but soon after were Counter order^d.

29 all was clear no appearance of the Enemy finished the bridge across the Lake to Independant point so that men could pass

30. all was in peace. Capt. Dow & M^r. Adams din^d with me — Visited my workmen as usual.

31. nothing material happened. I din^d with Col. Hartly Col. Wayne D^r. Canada & D^r. Johnson.

Nov^r 1. Col. Eaton came in with his Reg^t & a Detachment from Crown Point. & says that

8. Went to Ticonderoga, with Genl. Schuyler and Genl. Gates, Viewd the grounds on the East Side ye Lake with Col. Trumball on one Hill, took 26 Carpenters with me to repair ye Vessels and the Saw mill at Skeensboro.

9. Viewd the Grounds on the east with Genl. Schuyler and Genl. Gates, round the peninsula, found Water by diging on the top of the Hill. . . .

10. Went over and Marked out a road from the North point to the top of the Hill with Col. Wain [Wayne] and Col. Trumball. Genl. Sullivan⁵ Reconoiterd the Hill with me. I went up East Creek to the Head about 6 miles, a muddy bottom.

11. Went over to the point with 200 Men to Clear a road, Dig well, etc. It was a Very rainy Day. We returnd about 12 o'clock to camp, Very wet. . . .

18. Visited all my workmen as Usual but found many of them Sick and great complaints of the want of provision, yt they had only 12 ouz. of pork and 1 1/2 lb of Flower pr Day.

19. A Very Heavey Rain last night and continewd the chief of the Day. 2 men of Col. [John Philip] De Haas Regt. were found in there tents drown-d in warter, many others lay half coverd or Set up all night. Such a heavey Rain is sildom known. This Day by Genl. Gates order I Recd 98 Dollars which will enable me to purchase Cloathing, if I can find them, but they are very scarce and deer. . . .

23. Laid out the park for the artillery on Rattlesnake Hill, bought Carpenters tools of Six men and then discharged them.

24. Dind with Genl. Gates, and in the afternoon we went round the old French lines with Col. De Haws, which our people were at work Very fast.

25. Genl. Gates and several other Officers went over to the point with me and highly approvd of the works that I had laid out there, and ordered that 220 men Should work daily at least and as many more as could be im-ployed and was in high good humor. . . .

26. . . . This Day there is a supply of fresh provision, and it is ordered that all the troops shall have 4 days fresh and 3 Days Salt meat a week.

27. Went over to the East point with Genl. Arnold and Col. Trumball. We orderd the encampment of the Brigade to be alterd. Recd. 200 Dollars to pay for Tools, by order of the Genl. . . .

28. This morning I visited all the Artificers before breakfast as Usual. I paid . . . 212 Dollars for Carpenters tools as there is no Quartermaster Genl. at present with this army, I have that duty to do in part, and I have the intire direction of all the House and Ship Carpenters, the Smiths, Ar-mourers, Roap makers, the Wheel and Carriage makers, Miners Turners, Coalyers, Sawyers and Shingle makers, which are all togeather 286, besides the direction of all the fateagueing parties, so that I have my hands and mind constantly employed night and Day except when I am a Sleep and then sometimes I dream. . . .

30. At Ticonderoga and lodg in the Redoubt East of the Garrison in the point of Rocks, but as my business calls I am on Mount Independancy some Days 2 or 3 times in the Day as was the case this Day. . . .

[August] 10. This Day the paymaster Genl. dind with me and the Com-misery Genl. with several other Gent. Made up the pay roll for the artificers of all Trades.

11. Went over to Independant point with Genl. Gates and Arnold to view the works. They exprest entire satisfaction. In the afterNoon I Recd. (by a warrant from the genl.) 1262 Dollars to pay the artifficers under my care. . . .

14. Laid out a redoubt on Independant Mount, which Genl. Gates and others aprovd. of. . . .

15. Raised the Labratory. Laid out and began 2 Ridoubts on the North end of the old french lines in the afternoon.

16. Laid out a Redoubt on the North side of the point

17. Laid out a wharf at the South side of Independant point and orderd a large Stoer House to be built and also 2 guard housen and then I returned with Col. Wain and Col. Trumball, went into the woods near the Saw mill by a Spring where we had a fine dinner, Venison roasted on Sticks Indian fashion, an Elegant Entertainment. . . .

[September] 7. All hands at work at Daylight prepairing our batteries against the worst.

8. I was Very poorly this Morning as I had been yesterday and last Night I Took Camphire that made me Swet all night, this morning took a portion Rubarb that workt very kindly. In the afternoon I went out to Col. Brewers and Willards Encampments and laid out a fort on the Top of the Mount, North of the Mills. . . .

9. I was Very porly with Hard pain in my head and Eyes. At Evning took a Vomit that workt well but kept me up part of the night. . . .

10. Was so Sick that I did not go abroad, pain in my head across my Eyes and in my Stomach and Sick at the Stomach but could get nothing to take and so woried the Day thro. . . .

11. Paying of my workmen. . . . I had a Severe fit of Ague and fever that lasted 9 hours. About Sunset I took a Vomit that workt well and gave Some Relief, but very faint and weak. . . .

15. This Day I misst. having the ague, but was so faint that I can hardly walk, my stomach loathing all kinds of food, a little wine and water or Wine Whey being the chief of what I have taken Since Last Sabath Day. I am much better this evning but far from being well.

16. Was somthing better and it is of the Lords mercy that I am alive after Such a hard and constant fatigue being out Early and late Crossing the water in the thick Fogs, that are peculiar at this place.

17. . . . I was better but no relish for food. Began to repair my Redoubt. . . .

19. Took physick, I broak out all over Very full which burnt and is Very tedious to bair, but it is probible this may be of great Service for I have been better 4 Days from the time I broak out with this Rash.

20. Went a broad a little, but still unwell.

21. Was poorly, went a broad but little. Majr. Hay Came home, has been down the Lake 45 Miles, brought up a plenty of Sauce for our Mess. He Says that 3/4 of all the Inhabitants in this country are Sick, such a time has not been known before.

22. I took physic, was better a good deal, feel well to what I have been. . . .

Octor 1. Went over to the point with Col. Pallaceer⁶[Pelissier] to Lay out the fort. We Run Round the work but did not finish. . . .

2. Went with Col. Pallaseer, Capt. Newland and Lt. Dallace over to In-dependant Hill leying out the Fort agreeable to a New Plan I had drawn, the Several Assistant Engineers Dind with me. I Supt. [supped] with G. Gates.

—Baldwin, *Revolutionary Journal*, pp. 58–66, 70, 74–76, 78.

Besides strengthening the garrison and its defenses, the artisans helped ready a fleet intended to beat back the British on Lake Champlain. In October 1776 a full-scale encounter finally took place on the lake off Valcour Island. Although the British survived and the rebel fleet was destroyed, the season was too advanced for the enemy to attempt a move against Ticonderoga before spring.

On October 20 Baldwin got Gates's approval to build a bridge across Lake Champlain from Ticonderoga to Mount Independence. Immediately he set to work on a boom and by the 29th the bridge was finished "so that men could pass."

General Gates's orders for 1776 recorded by Col. Anthony Wayne, Baldwin's commander, illustrate further the Chief engineer's role at Ticonderoga. Baldwin directed fatigue parties and artisans, was responsible for maintaining tools in readiness, and surveyed campsites and redoubts.

3. "THE GENERAL IS CONFIDANT A SPIRIT OF EMULATION WILL ANIMATE EACH BRIGADE TO FINISH THE TASK ASSIGN'D THEM"

From Anthony Wayne's orderly book.

10 July 1776. Two captains, six subalterns, eight serjeants, eight corporals, two drums, and one hundred and ninety two privates to parade tomorrow morning at eight oclock, to go on fatigue under the direction of Lieutenant Colonel Baldwin, Chief Engineer. . . .

11 July 1776. . . . Lieutenant Beal with the house carpenters and Mr. Noah Nichols with the wheelwrights, are to remain at Ticonderoga, under the direction of Colonel Baldwin, Chief Engineer. . . .

13 July 1776. Lieutenant Colonel Baldwin will draw provision twice a week, for all the artificers and take the whole under his direction. . . .

14 July 1776. The chief engineer to order the artificers to get proper necessary's made over the rock opposite their hutts, that the new encampment may be kept clean against the troops arrival. . . .

19 July 1776. The Chief Engineer is to get all the wood axes helv'd and ground immediately that they may be ready for use when the weather clears up. . . .

21 July 1776. As the Chief Engineer will have a sufficient number of felling axes ready to employ a large body of men tomorrow, the General desires the commanding officers of the three eldest brigades will send as many men as can be sent from those off duty to clear the ground for the incampment of those brigades. . . .

22 July 1776. The Chief Engineer Colonel Baldwin will order that the soap deliv'd to the artificers be divided properly between them. . . .

27 July 1776. The commanding officers of regiments the Commanding Officer of Artillery and the Chief Engineer will be very exact in obliging their respective surgeons to make an immediate report of every person infected with small pox. . . .

28 July 1776. The commissary will issue eight pounds of soap to every hundred men pr week now in this camp upon a proper sign'd return being deliv'd to him by the commanding officer of each corps. The Commanding Officer of Artillery and Chief Engineer for the Artificers to draw in proportion to their numbers. . . .

30 July 1776. The General is exceedingly astonish'd and concern'd to find such a supineness and indolence previling in the 3 brigades station'd upon Mount Independance, as if it was a time of profound peace and no enemy to contend with, he is therefore oblig'd to represent to B. G. [Benedict] Arnold, and the colonels commanding brigades and to every commanding officer of a regiment belonging to those brigades how necessary it is for them in the present emergency for them by their authority and example to inspire all under them with a spirit of emulation in forwarding the works, clearing the ground and preparing to receive the enemy, the troops upon the Mount should be convinc'd by their last year's campagne at Cambridge of the utility of good works; the General trusts they will loose no time in raising them.

Colonel Baldwin will this day acquaint the commanding officer of each brigade with the work expected to be done by that brigade, and the General is confidant a spirit of emulation will animate each brigade to finish the task assign'd them. . . .

The fatigue parts for the future are to begin work at 6 oclock and have their breakfast before they begin.



They will be dismiss'd at twelve oclock for dinner till one oclock then work till seven. . . .

31 July 1776. Lieutenant W. Augustus Patterson of Colonel Pattersons regt. is appinted an assistant engineer to Colonel Baldwin and is to be obey'd as such. . . .

16 Aug 1776. The Cheif Engineer to see that all the spades and axes in store are immediately helv'd, and a party are constantly kept grinding of axes. . . .

17 Aug 1776. The Cheif Engineer, to deliver 15 axes to the field officer, of the main guard tomorrow morning at guard mounting, they are to be answerable for those axes, to the officers who reteire them, and those guards are not to be relieved, until the axes are in good order deliver'd to the releiving officers. . . .

24 Aug 1776. The Cheif Engineer with Col. St. Clair and Col. Wayne will tomorrow morning at 10 oclock take a review of the ground near the saw mill fix upon a spott for the encampment of two continental regts. and the best situation for throwing up a redoubt to command the pass. The D. A. G. and Deputy Quarter Master Genl. will also attend Col. Baldwin. . . .

28 Aug 1776. During the recess from work occasion'd by the rain the cheif engineer will order as many axes to be ground as possible as soon as the weather clears up. The commanding officer of each regt may receive from Col Baldwin 24 axes giveing his receipt for the same. Those axes are to be distributed to three of the most expert axmen in each company who are to keep them constantly in good order and to be ready to turn out when call'd for. . . .

29 Aug 1776. The cheif engineer, will order the broken hand barrows to be repai'd and as many new ones made, as are immediately wanted. . . .

2 Sept 1776. All the spades, pickaxes, and billhooks now in possession of the respective regts (except a spade and pickax to each regt) are to be immediately brought to the Chief Engineer. Those on mount Independance are to be brought to the landing, those on the West side to Head Quarters. . . .

4 Sept 1776. . . . Major Pail of Col Wheelocks Regt. Leiut Ashbeldelis of Col Winds Regt and Ensign Perold of Col Maxwell's Regt are joynd Assistant Engineers under Cheif Engineer Col Baldwin. . . .

6 Sept 1776. A return of all the axes spades pick axes shovels billhooks and hoes remaining in store to be deliver'd to the Qr M G. at 6 Oclock this

TICONDEROGA DEFENSES. *John Trumbull drew this map to show existing and projected works at Ticonderoga and Mount Independence as of August 1776. Note the fortification proposed for Mount Defiance (Sugar Loaf Hill), top center.*

Trumbull, Autobiography

evening. The commanding officers of regts will take notice that the fauling axes lately deliver'd to their respective troops are to be return'd when call'd for, and such as are dificient must be paid for, by a stoppage out of the regimental abstracts. As a considerable body of troops will joyn the army this week, the Cheif Engineer must take care to provide intrenshing tools sufficient to employ all the working parties. . . .

28 Sept 1776. Mr. Christopher Joseph Delezenne is appointed an Assistant Engineer under Col. Baldwin, he is to be obey'd as such.

—*Bulletin of the Fort Ticonderoga Museum*, 11:94–188 *passim*. Courtesy of Fort Ticonderoga, Ticonderoga, New York.

Like Baldwin, Christopher Pelissier arrived at Ticonderoga that summer. A native of France, he had assisted the American cause in Canada by supplying shells and cannonballs. Forced to abandon his Canadian operation after the American defeat, Pelissier applied to Congress for aid. His reward was an appointment as engineer lieutenant colonel on 29 July 1776. Pelissier went to Ticonderoga as Baldwin's subordinate.

In October 1776, as the British threatened to push down Lake Champlain and take Ticonderoga, Pelissier scrutinized the Jersey Redoubt, one of the fort's new outworks. He found it to be technically inferior, largely because the enemy could not be enfiladed from the salient angle on the north side and because there was insufficient maneuvering room inside for the troops. What was needed was a second, covering redoubt. In his report on the works, Pelissier, whose engineer training is unknown, exhibited a fairly high degree of technical sophistication, particularly in comparison with Baldwin.

4. PELISSIER'S OBSERVATIONS ON THE JERSEY REDOUBT

October 21, 1776

It is highly probable that the enemy will attack that redoubt at the salient angle on the north side, for the following reasons:

Firstly. Their column cannot be enfiladed from that angle.

Secondly. Their left, bearing on the water side, cannot be galled on that quarter.

Thirdly. That angle is not at all defended.

It is true the next redoubt may fire a little on the right of the column of the enemy, but nothing stops a column which is not enfiladed.

It is evident that a column cannot be enfiladed from that acute angle, and that, therefore, the column will succeed. The enemy may then form a

lodgment in the ditch without being seen either by the guard in the redoubt, the flanks of which are not defended, or by the next redoubt. And even though they should be seen from that redoubt, we could not fire upon them from that without running an imminent danger of firing upon ourselves. In this case the enemy have two ways left of carrying the redoubt: 1st. They can blow up that angle by opening a gallery under it. 2dly. By storming it, in which last case every thing will be in their favour. 1st. They may, unseen, destroy the fraises. 2d. The interior epaulement, which is now making within the redoubt, is an insuperable obstacle to the continual fire which might be made for preventing its being carried; for now there is no sufficient room left between that epaulement and the banquette of the parapet. But even though there should be no epaulement, there is not room enough between the banquette and the platform of those guns which fire on the water; so that the troops within cannot perform their manoeuvres.

I judge, therefore, that if the redoubt be attacked it will be at that acute angle, and that if attacked it must be carried, unless another redoubt should be made to cover it. And this last redoubt ought to be strong enough not to be itself carried by the enemy, for it cannot be too much remarked that the *Jersey* redoubt on account of its too acute angle, cannot defend it. . . .

—Force, *American Archives*, 5th ser., 2:1970.

To attract artisans to the New York wilderness, the wages offered had to be high. For example, the company of carpenters who concluded the following agreement with Baldwin in December 1776 were to receive between eight and twelve shillings pay, one and one-half ration, and a gill of rum per day. At that rate, the top-paid craftsman made sixty shillings or £3 per week, between \$7 and \$8 in New York currency. Such benefits for the artisans often led to friction with Army regulars who were paid considerably less.⁷

5. AGREEMENT BETWEEN BALDWIN AND A COMPANY OF ARTIFICERS

Head-Quarters, Albany, December 16th, 1776

Memorandum of agreement made and entered into this sixteenth day of December, 1776, between Colonel Jedu'n Baldwin, Chief Engineer on the Northern Department, of the first part, and Mr. Jedi'h Thayer, of the State of the Massachusetts-Bay, Gentleman, and Mr. Nathaniel Emerson and the persons whose names are hereunto subscribed, and seals affixed, of the second part, all good workmen at the carpenter's business,

to the number of sixty men; the said parties of the second part, each for himself, promises and agrees that they will immediately repair to such place as the said Colonel Baldwin shall direct, and there employ themselves in constructing such works or buildings as the said Engineer shall order.

That each of the parties of the second part shall, during the time he shall be in the publick employ conformable to these resolutions, each day continue at their said work and employment not less than ten hours.

That if any of the said parties of the second part shall leave the said work, or go from the post where they shall be employed, the leave of the said Colonel Baldwin, or the commanding officer of the post where he shall be so employed, being first obtained, he or they so going off shall forfeit all the wages that shall be due to them on account of their service performed in consequence of this agreement.

In consideration whereof, the said Jedu'n Baldwin, Engineer, promises and agrees, that the said Jedi'h Thayer shall have and receive twelve shillings per day, and Nathaniel Emerson ten shillings per day, and every other of the said parties of the second part the sum of eight shillings per day, New-York currency, for every day that they shall be in actual employment. That over and above that sum, the said parties of the second part shall severally receive one and a half ration of provisions and one gill of rum per day. That the said wages shall commence from the time the said parties of the second part shall respectively leave their usual places of abode, allowing at the rate of one dollar for every twenty miles travel. And the said parties of the first and second part do hereby agree with each other, that if any of the said parties of the second part is taken sick during the time which they shall be employed as above, the person so taken sick shall not be entitled to wages for the time he absents from working by reason of sickness, unless the said Colonel Baldwin, or the commanding officer of the post where they shall be so stationed, shall, on application to him made, refuse to discharge them, and then they shall be entitled to wages from the time of such refusal. . . .

—Force, *American Archives*, 5th ser., 3:1250.

In December 1776 the rebels expected a renewed attempt on Ticonderoga. In a memorandum the chief engineer proposed changes in the fort's defenses and estimated the supplies needed for the coming year. The large amount of materials requested underscores the great commitment made at Ticonderoga. Baldwin appeared anxious to get to work before spring; but as always, manpower was the deciding factor.

6. BALDWIN REVIEWS TICONDEROGA'S NEEDS FOR 1777

December 1776

Memorandum of sundry Articles that may be necessary to carry on the Works in the Northern Army in the Year 1777:

A, ⁸ 2,000 Iron Spades	300 Augers of different Sizes
A, 2,000 Iron Shovels	150 Handsaws, adzes, and
A, 3,000 Felling axes	other Carpenters Tools
A, 500 pick-axes	30 Dozen of Files of different sort
A, 1,000 Bill-hooks	40 Dozen Gimlets
A, 200 stone Hammers	20 Dozen Nail Hammers
A, 200 Masons Trowels	800,000 10d. Nails
A, 20 Crow bars	300,000 6d. [Nails]
300 Broad axes	Ten Casks of 20d. Nails
50 Iron Squares	Spikes and other Nails as the
100 pair of Compasses	Service may determine
100 pair of Framing Chisels	A, a large Quantity of Bar Iron Steel
A, 400,000 Feet of Inch pine Board	A, 60,000 feet of 3 Inch oak Plank for platforms
A, A large Quantity of plank and Timber for Gun Carriages	

The following Works are most suitable to be done during the Winter should there be Men sent to do it:

Making one hundred Platforms for Cannon.

1,000 Hand Barrows. Repairing of the old wood Axes.

Pickaxes, Shovels, Spades, etc. Making Carriages for Cannon.

To secure the old Fort with Plank by way of Blinds to prevent Surprise.

Building of 3 Block Houses on the Southeast Part of Mount Independence.

Building of a Block House East of the old Fort near the General's Quarters, or back of the Store by the Wharf. Building of a Block House on the Height of the old French Lines.

Driving Piles thro' the Ice across the Lake to strengthen the Boom.

Memorandum of Works to be done near Tyconderoga next Spring:

Building a Fort on Mount Independence with 14 Bastions and a covert way on the East and South Sides.

Finish the Barbet Battery with Merlons and close the Rear.

To repair the old Fort with Stone and Lime, and build a Block House on the South West Hill across the Lake.

—Papers of the Continental
Congress, roll 30.

In London during the winter of 1776–77, Maj. Gen. John “Gentleman Johnny” Burgoyne revived the idea of a British thrust from Canada along the Lake Champlain–Hudson River route, and King George III heartily endorsed the proposal. According to the final plan, approved in late February 1777, Burgoyne would command a major offensive aimed at Ticonderoga and Albany, while a diversionary force moved along the Mohawk River toward Albany from the west. Once in Albany the two forces, with a combined strength of more than nine thousand men, were to make contact with General William Howe in New York City.

Burgoyne returned to Canada in early June. Three weeks later he sailed south on the Richelieu River to Lake Champlain. The campaign was under way. Meanwhile the rebels worked feverishly to ready Ticonderoga for the expected British assault. Baldwin, still chief engineer, again provided the most detailed account of events at Ticonderoga.

During the spring of 1777 one of Baldwin’s major projects was a new bridge spanning Lake Champlain from Ticonderoga to Mount Independence, anchored in stone-filled piers and protected by a boom. The foot-bridge and boom completed the previous October had not survived the winter. The work was tough: the bridge required strong supports because of the lake’s depth and swift current. Not surprisingly Baldwin suffered numerous reverses during the course of the operation. He was still working on the crossing in July when the British took Ticonderoga. Other projects that spring included a crane for hoisting supplies up the steep cliff on the western side of Mount Independence, a hospital and an ammunition factory on Mount Independence, and new redoubts near the old French lines on the Ticonderoga side of the lake.

On May 12 Lt. Col. Thaddeus Kosciuszko, a Polish volunteer and engineer officer, joined Baldwin at Ticonderoga. He was fresh from work on the Delaware River defenses and had been recommended by General Gates, now Ticonderoga commander. Although he expected Kosciuszko “to serve not supercede” Baldwin, Gates so valued Kosciuszko as an engineer that he wanted the Pole to examine the Ticonderoga works and make recommendations for necessary improvements and additions.

Inevitably some conflict resulted as Kosciuszko found the fortifications at Ticonderoga–Mount Independence lacking. He recommended a new entrenchment and suggested additional measures to keep ships clear of the fort. Taking further issue with Baldwin’s work, Kosciuszko reported to Gates: “We are very fond here of making Block houses and they are all erected in the most improper places.”⁹ Wishing Kosciuszko’s plans to be

A BLOCKHOUSE. This plan is of a typical eighteenth-century blockhouse, probably similar to those erected on Mount Independence.

Dunnack, Maine Forts

The Section and Plan of a Block-house

REFERENCE.

Fig. 1.

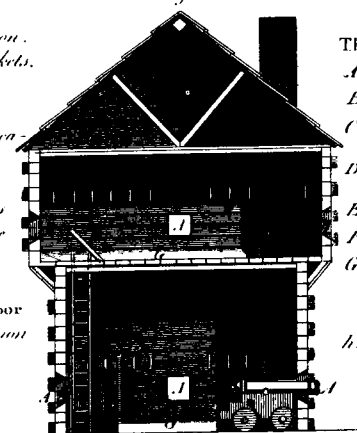
- A. The Port holes for Cannon.
- B. The trap holes for Muskets.
- C. The Door.
- D. The fire place.
- E. The Saddle of Communication to the upper Story.
- F. The Trap Door.
- G. The platform that serves as a parapet, and for the Men to step on.

Fig. 2.

The Plan of the Ground Floor

- A. The Port holes for Cannon.
- B. The fire place.
- C. The Door.
- D. The platforms

Fig. 1.



REFERENCE.

Fig. 3.

The Plan of the upper Story

- A. The port holes for Cannon.
- B. The fire place.
- C. The trap Door.
- D. The platform as in the lower Apartment.
- E. The Officers Apartment.
- F. The Door leading to it.
- G. The Window.
- H. Holes made in the floor to fire upon the Enemy if they gain possession of the lower Apartment.

Fig. 3.

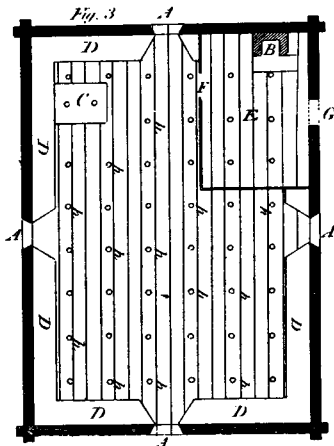
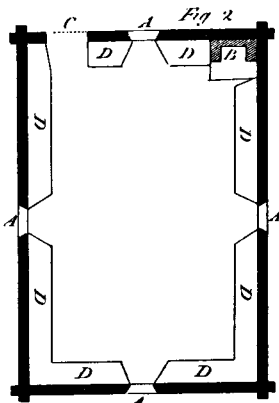
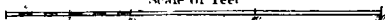


Fig. 2.



Scale of Feet



adopted, Gates declared, "Colonel Baldwin will gain my affection, and Esteem, by cultivating the Friendship of that Capable Young Man [Kosciuszko]." ¹⁰ After Kosciuszko returned to Ticonderoga in early June following a brief absence, the two engineers collaborated in directing additional works on both sides of the lake. Events at Ticonderoga in the period March–May, 1777, unfold in selections from Baldwin's journal.

7. BALDWIN CHRONICLES THE PROGRESS AT TICONDEROGA

From Jeduthan Baldwin's journal.

March 1 [1777]. Began to build the Great Bridge, from Ticonderaga to Independant point. . . .

9. Sunk 10 Cassoons and put down many of the posts. . . .

10. Geting down the Cassoons, the Ice began to fail.

11. Workt at ye Bridge, rode up East Creek.

12. Drawd. Plans for Hospital.

13. Began to cut timber for Hospitals, the Sleyemen went off work.

14. The Ice very Roten, left working at the bridge, went over ye Mount. . . .

16. . . . Began the Plan of the Fort on Mount Independance.

17. Drawing plan. Raised the Roof of the Block house by Head Quarters. . . .

26. One Peer of the Grt Bridge fell to peices.

27. The Bottom of another Peer fell out. . . .

29. So Cold that we could not work at the Bridge. Geting Timber for ye Hospital. . . .

31. Finished giting timber for 4 Hospitals. A warm Day, wind at South. Ice fails fast.

April 1. At work at ye Bridge, Raisd ye Bake House.

2. Wrote to Genl. Schuyler and sent a plan of a proposed fort to be built on mount Independance, went with ye Qr. M. Genl. and laid out a large gardin at ye foot of the Mount. . . .

7. . . . Went over to Mount Independance. Lookt out a place to hoist the provisions out of the Lake on to the Mount with a Rope and blocks. Dind. with Genl. Wayne.

8. At the Bridge and among ye workmen. . . .

14. Rode to the landing with Mrs. Hay, Genl. Wayne, Col. Long, Majr. Hay and Esqr. Winslow, went to accompany her out of camp going to albany thinking it not safe to stay at this place as the Lake is now open for the Enemy and our Numbers inconsiderable by no means Equal to a body to defend this place. Drank Tea Punch and wine . . . and live as gayly as if danger was at a distance. . . .

19. 4 Indians fired at by the sentry at the Mills last night. At work at the Bridge, Block housen and Laying Platforms. . . .

20. Went to the mills and to mount Independance.

21. One of the piers of the Bridge turnd. over. . . .

24. Raisd. the fraim for the Crane on the edge of the Mount for hoisting up whatever may be wanted on Independance. . . .

[May] 9. Laid out and began a Redout between the french lines and ye old fort on high Ground.

10. Carpenters left work at ye Bridge and went to driving a frieze round the front of the french lines. . . .

11. Began the Redout on ye Hill at ye french lines. 13 Tories brought in. . . .

14. Viewd. the Lines. At work on ye Redouts. A fine Day. . . .

15. Went round the lines with Lt. Col. Kosiosko. . . .

16. . . . Drawing plans of ye Hospital and the works at Fort George and Sent them down to Genl. Gates. Rainey Day.

17. Went round to the works on this side and on Mount Independance. . . . A Showry Day. . . .

19. Raisd. the flagstaff on Mount Independance.

20. Genl. Poor Came in with 600 Men.

21. Went round the work with Genl. Poor.

22. A large fatigue party at the French lines. . . .

23. At the works on the french lines and at Mt Independance. . . .

24. Majr. Ayres and Capt. Wilcott [Jarius Wilcox] Joind. my works as Assistant Engineers. . . . A fine pleasant day.

25. The boom and Bridge in a heavey gale of wind gave way and with some difficulty they were brought back to place. . . .

28. . . . Began another redout on the high ground N. W. from the fort in ye rear of ye french lines.

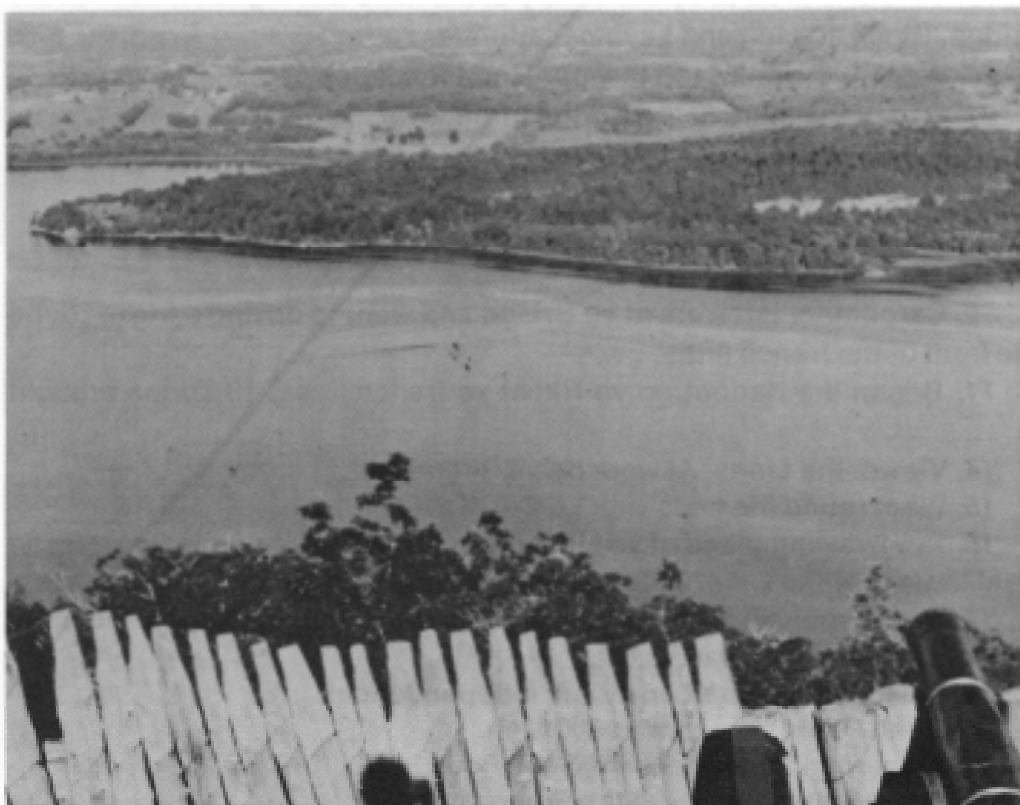
29. Work at ye Bridge Anchoring of ye Boom and geting Logs for it. Laid out a Redout to ye Left between ye old fort and french Lines

30. Recd. 9,000 Dollars, paid of my workmen. Had 10 Cannon come from Lake George. . . .

31. Rode to the Mills and round to the workmen. In the afternoon to Mt. Independ.

—Baldwin, *Revolutionary Journal*, pp. 94–104.

Next, an excerpt from the journal of Du Roi the Elder, a lieutenant and adjutant serving the Duke of Brunswick in Burgoyne's expeditionary force, offers the best description of Baldwin's "great bridge." Du Roi the Elder made his observations after the fall of Ticonderoga. He was considerably impressed by the rebel accomplishments achieved at such great expense.



MOUNT INDEPENDENCE. *The position is shown here as it is seen looking east from restored works on Mount Defiance.*

Photograph by Erik Borg, 1968

8. "THE REBELS HAD KEPT ON WORKING CONTINUOUSLY WITH UNFAILING COURAGE"

From the journal of Du Roi the Elder.

[July 13th 1777.] A bridge of more than 350 feet long, was built from Ticonderoga to Mount Independence, which served not alone for the purpose of communication between the two forts, but also to block completely the passage and entrance for ships to South Bay, a piece of work which should be noted for curiosity's sake, and which does honor to human mind and power. It is only to be regretted that the work was commenced for fighting purposes. It therefore, will hardly be completed as it deserves. It may be compared to the work of Colossus in the fables of the heathen. ...

The width of the water between Ticonderoga and Mount Independence is, as mentioned before, more than 700 feet, and the depth in the middle 25 feet, which diminishes very little towards the banks, thus allowing even

big vessels heavily loaded, to pass. The current is so strong that a pontoon bridge, or any other kind of floating bridge, could not resist it for any length of time, not taking into consideration an occasional strong wind. For supporting and strengthening the bridge 23 caissons (as the rebels called them), filled with stone, had been put into the water in a straight line across. These caissons are made of tree trunks 3–4 feet in diameter and 20–25 feet long, put together in squares. In the beginning they were kept in place by anchors. After they had been built up above the water, they were filled with quarry stones, of which there is an abundance. This would sink them and keep them in place under water.

If you take into consideration the depth of the water, you can get an idea of the amount of work involved.

It was first decided to put the bridge on top of these caissons, which, however, had not been completely filled with stone. The middle of the bridge was intended for a drawbridge for the passage of big vessels. Smaller boats were to pass underneath, the caissons extending above the water 10 feet and more. Now this plan was changed, and a floating bridge of strong beams was made on one side of the caissons. In order to prevent all vessels from passing this bridge, even by force, some sort of a turnpike had been constructed of beams fastened together with heavy chains three inches in diameter, completely blocking all passage. Although the construction of the bridge had cost them about 3000 lives in two years, the men dying from fatigue and fever contracted by the unhealthy location of the place and the foul water, the rebels had kept on working continuously with unflinching courage.

It is well worth mentioning this fact, as such perseverance is seldom found in the history, except in a republic, where a general participation in a common cause would inspire and hold it. It is rarely, if ever, found in monarchies.

—Epping, "Journal of Du Roi the Elder," pp. 151–53.

On 12 June 1777 Maj. Gen. Arthur St. Clair assumed command at Ticonderoga. The garrison was critically short of men and supplies. Yet because Ticonderoga was a symbol of rebel strength—some called it the "Gibraltar of the North"—it could not be abandoned without a violent protest. Thus political considerations outweighed strategic reality. Resolving at a meeting on the 20th to hold out as long as possible, St. Clair's council of war decided to upgrade the defenses. During the next two weeks there was a flurry of activity concentrated on Mount Independence. Although St. Clair believed Ticonderoga and Mount Independence to be so intimately connected that "it will be very dangerous to give up either," he reluctantly supported Schuyler's contention that Mount Independence could outlast Ticonderoga, perhaps indefinitely.¹¹

By July 1, as the rebels placed themselves in a state of defense, Burgoyne positioned his army on the west side of the lake and dispatched the Germans under Baron Friedrich Adolphus von Riedesel to the east side. The attack began the following day. Mount Hope, guarding the route to Lake George, fell first: as the enemy approached, rebel forces burned and deserted the position.

Next Burgoyne wisely sent William Twiss, his chief engineer, to reconnoiter unfortified Sugar Loaf Hill. Although Kosciuszko had also urged fortification of the position, his arguments failed to convince Schuyler. Yet the move was even more crucial in 1777 than it had been a year earlier. None of the changes made at Ticonderoga–Mount Independence in the interim had made the 750-foot hill any less menacing. In fact, by allowing Sugar Loaf to go unfortified, the rebels dangerously exposed their bridge and the fortifications atop Mount Independence.

Concurring with the assessments of Trumbull and Kosciuszko, Twiss advised his commander to fortify Sugar Loaf Hill. Burgoyne agreed. Resolving that “where a goat can go a man can go, and where a man can go he can drag a gun,”¹² Brig. Gen. William Phillips took charge of the operation. By July 6 the British had positioned four twelve-pounders atop the hill, which they renamed Mount Defiance in recognition of their success. The enemy did not expect to shower the rebels with sustained gunfire. But the move dealt a decisive blow to American morale. St. Clair’s council hurriedly decided to abandon Ticonderoga and Mount Independence, a wise decision militarily if not politically.

Although St. Clair’s subordinates managed to bungle his plan of retreat, the rebel forces did escape across the bridge from Ticonderoga to Mount Independence the night of 5–6 July 1777. They partially destroyed the bridge behind them and withdrew into interior Vermont.

Recalling the circumstances of the American evacuation, Burgoyne stated:

The manner of taking up the ground at Ticonderoga convinces me they have no men of military science They seem to have expended great treasure and the unwearied labor of more than a year to fortify, upon the supposition that we should only attack them upon the point where they were best prepared to resist.¹³

True, officers like Schuyler had overrated the potentialities of the position, particularly on Mount Independence. But the rebels would very likely have had to abandon Ticonderoga no matter which side had fortified Mount Defiance. The crucial problem for the Americans at Ticonderoga was that the works exceeded in scale the number of men allotted to defend them—three thousand regulars and militiamen at the time of the evacuation. Throughout the rebel occupation the imbalance had never been corrected.

Full details of the final attempt to shore up American defenses at Ticonderoga–Mount Independence and an evaluation of the rebels’ chances for

holding on to Mount Independence after the fall of Fort Ticonderoga came out more than a year later in testimony by Kosciuszko and Baldwin at St. Clair's court-martial. St. Clair was ultimately acquitted of charges of abandoning Ticonderoga and Mount Independence and of failing to place the forts in the highest state of readiness. Excerpts from the testimony of the two engineers make it clear that a major effort was undertaken at Ticonderoga after St. Clair's arrival, and that in abandoning both positions he exercised sound judgment.

9. THE COURT-MARTIAL OF MAJ. GEN. ARTHUR ST. CLAIR

September 17, 1778

Testimony of Kosciuszko

Colonel Koseiuszko being sworn, *General St. Clair's question.* Do you recollect what the strength of the fatigue parties was, that were employed on Mount Independence on or about the 23d day of June, 1777?

A. About five or six hundred men were employed on the batteries at Mount Independence as fatigue men, after General Schuyler had been at Ticonderoga, and had given directions to put new works on Mount Independence. There was also a party employed in front of the works, in a thick wood, cutting abbatis; I do not recollect the number. I remember that General Fermoy's brigade was employed in the wood cutting abbatis. General Fermoy himself was there two or three days. Besides these, I always sent a fatigue party to cut the abbatis.

General St. Clair's question. Do you know whether there was a fatigue party likewise employed at the time on the Ticonderoga side?

A. I know there was a fatigue party employed on the breast-work.

General St. Clair's question. Did you not, by my orders, make some additions to the works on the Ticonderoga side?

A. Yes; between the west end of the French lines and the Lake. It was not quite finished at the time of the evacuation.

General St. Clair's question. Supposing Ticonderoga to have been abandoned, and the enemy to have been in possession of it, would it have been possible to have maintained the works on the point of Mount Independence, that were made for the command of the Lake and the defence of the bridge?

A. No; as the ground overlooked them about fifty feet.

General St. Clair's question. Do you recollect where the place from which we got our water was, on Mount Independence side, and the situation of it?

A. On the west side of Mount Independence, on the low ground, near the Lake.

General St. Clair's question. Could we easily get at the water?

A. No; It was very steep, and I think about one half a mile distant from the fort.

General St. Clair's question. Supposing the enemy had passed some of their vessels into South Bay, would it not have been wholly in their power to have cut us off from the water?

A. The spring would have been exposed to the fire of the enemy.

General St. Clair's question. Do you recollect the distance from the Lake to East-Creek, beyond the south end of Mount Independence?

A. About one half a mile or three quarters.

General St. Clair's Question. Would it not have been in the enemy's power to have annoyed, from the vessels from South-Bay, any troops that might have been marching across the Isthmus to the relief of Mount Independence?

A. It would have been in the enemy's power to have done it on account of the passage being narrow, a thick wood, and the possession of the lake.

General St. Clair's question. Do you recollect whether any works were begun to improve the redoubt on the high ground, on the point of Mount Independence?

A. Yes; by your order I marked out the lines, and prepared the fascines; which was after General Schuyler left Ticonderoga.

General St. Clair's question. In what condition was the fort upon Mount Independence?

A. It was a picketted fort, only for small arms. Picketted all round, some good and some bad.

General St. Clair's question. How many men could the fort contain with convenience for the defence of it?

A. About 1000 men.

General St. Clair's question. What batteries had the enemy erected against Ticonderoga at the time, or before the evacuation took place?

A. One battery was erected against the Jersey redoubt on the opposite side of the Lake, about half a mile distant, and on higher ground. They had made some works where they had an encampment against the French lines, about half a mile or three quarters distant. The enemy had also taken possession of Mount Hope, a retrenched camp, which had been occupied by us the campaign before, by which the communication with Lake George was cut off. They had taken possession of the mill, burnt the block-house, and passed on the other side of the creek, where they took possession of a hill which commanded all Ticonderoga and Mount Independence, and had begun a firing on the sloop that was stationed for the defence of the passage from Lake George. They had also begun some works on a point on the east side of the Lake, opposite to the bridge. . . .

Q. Court. Could the enemy's vessels lie in South-Bay, in a situation to command the spring, and not be exposed to our batteries on Mount Independence?

A. There was high ground, and batteries could have been placed there to prevent them.

Q. Court. Could the enemy's ships lie in South-Bay, in a situation most to annoy a reinforcement going to Mount Independence, without being exposed to the fire of our batteries from Mount Independence?

A. They could.

Q. Court. Was there any other spring on Mount Independence, out of the enemy's fire, that the garrison could have been supplied with water from?

A. No other lasting one.

Q. Court. What kind of ground was it on the height on Mount Independence. Whether stony, difficult of raising a parapet on, or of sinking a ditch?

A. Very stony and rocky ground, and would require a great deal of labour to put on the works. A ditch could not be sunk to any proper depth without blowing the rocks. . . .

Testimony of Baldwin

General St. Clair's question. Do you recollect whether the working parties at Ticonderoga and Mount Independence were increased or decreased on or about the 23d day of June, 1777?

A. They were considerably increased. There were several works that were not finished that were ordered to be done, besides a number of new ones laid out that the men were ordered to work upon, and we continued at these works both at Mount Independence and Ticonderoga until the day we came away, besides a considerable reinforcement to the party at work upon the bridge. As the troops increased the working parties increased, we having almost every man upon the ground on duty of one kind or another. There was a regiment of militia constantly on duty in the woods, under my direction, providing timber for the bridge, that was not included in the details. I had about 100 men, besides the militia on duty with me there, that were not included in the details. I had about 30 out of the militia also making shingles, and a party making brick, not included in the details.

General St. Clair's question. Was the boom that was laid below the bridge in the Lake fixed in such a manner, that it would have been able to have resisted the shock of a vessel?

A. The anchors were chiefly lost from it, the cables having been broken by the ice. I rather think it would not have stopped their heavy vessels, though it might their smaller ones.

General St. Clair's question. Did you receive directions for building a general hospital at Ticonderoga, and were you not employed on that work?

A. I did, from General Schuyler. I was at work on it about the 23d of June, and the greater part of the fatigue-men were then taken from that work to be put on other works. Some of the artificers were taken off, though the greater part of them continued at work on it.

-“Trial of Major General St. Clair,” pp. 58-61, 90-91.



SARATOGA. *This view is from the restored American river works at Saratoga. Speaking of the position, fortified under Thaddeus Kosciuszko's direction, the American commander Horatio Gates declared: "In war, as in Medicine, natural causes not under our control, do much. In the present case, the great tacticians of the campaign, were hills and forests, which a young Polish Engineer was skilful enough to select for my encampment" (Quoted in Haiman, Kosciuszko, p. 29).*

Once Ticonderoga had fallen Burgoyne had a choice of two routes for his advance toward Albany. The preferable route led to the head of Lake George and from there across land for ten miles to the Hudson River at Fort Edward. A second route reached Fort Edward from Skenesboro and Fort Ann but involved many potential hazards. Making a crucial mistake, Burgoyne chose the less advantageous route for his troops.

Keeping barely ahead of the enemy, rebel work parties directed by engineer Kosciuszko impeded Burgoyne's advance by felling trees, digging ditches, and destroying bridges all along the way. The tactic worked: it took the British twenty days to move twenty-two miles. Shortages of food, horses, and supplies further afflicted Burgoyne, whose line of communications stretched precariously nearly 200 miles to Montreal. At Bennington on August 16 American irregulars halted a bold British foraging expedition into Vermont. Before the end of the month the enemy suffered another setback as their Indian allies abandoned Col. Barry St. Leger's thrust down the Mohawk River valley. Despite his failure to get supplies and reinforcements, Burgoyne persisted with characteristic arrogance in his slow march toward Albany. On September 13 he crossed the Hudson on a bridge of boats. A showdown was only days away.

Restored to the command of the Northern Department, Gates prepared to meet Burgoyne before he reached Albany. Kosciuszko, serving as Gate's engineer, chose and fortified a position on Bemis Heights overlooking the Hudson north of Stillwater near the village of Saratoga. On September 19, in the First Battle of Saratoga, the rebels attacked from trees and underbrush at Freeman's Farm as the enemy attempted to take the American left. Burgoyne was stopped, but he was not destroyed as he might have been, due to Gates's reluctance to move out of his entrenched position and his failure to support Arnold.

On October 7, after days of waiting in vain for reinforcements, Burgoyne launched another assault on the American left. In the ensuing Second Battle of Saratoga, Gates acted more decisively; and, defying orders, Arnold led an attack on the British entrenchments constructed at Freeman's Farm after the first battle. The results were devastating for the enemy. Burgoyne withdrew to Saratoga and on the 13th decided to negotiate a surrender. Four days later, after considerable haggling, Burgoyne accepted Gates's generous terms and signed the Convention of Saratoga.

